

**Russian Military Reform Since the Collapse of the Soviet Union: How Effective is
the Russian Military as a Fighting Force?**

by

Lt. Col. Jill S. Skelton
National Defense Fellow
Institute for the Study of Conflict, Ideology and Policy
Boston University

April 14, 2000

The views expressed in this academic research paper are those of the author and do not necessarily reflect the official policy or position of the U.S. Government, the Department of Defense, or any of its agencies.

20010921 133

DISTRIBUTION A:

Approved for public release; distribution is unlimited.

Air Force Fellows Program
Maxwell AFB, Al 36112

ABSTRACT

AUTHOR: Lt Col Jill Skelton

TITLE: Russian Military Reform Since The Collapse Of The Soviet Union: How Effective Is The Russian Military As A Fighting Force?

FORMAT: Research Paper

DATE: 14 April 2000 PAGES: 49 CLASSIFICATION: Unclassified

With the disintegration of the Soviet armed forces beginning in the 1990's, Russia has had to create a national military force within the context of a new political and economic environment. The Russian armed forces' difficulties in redefining and restructuring itself reflect the greater problems faced by Russian society as a whole. This paper looks at the problems faced by the Russian armed forces in this rebuilding effort, its current status as an effective fighting force and a prognosis for the future. Today, the remnants of the once-feared Soviet Red Army -- the Russian armed forces -- finds itself in crisis. Russian senior officers are faced with debilitating problems of doctrine, manning, and the sustainment of the military services across the board. The solutions to these problems are at best, uncertain, within the context of a failing Russian economy and the indecisive support of Russian political leaders. Without a major program to rehabilitate the armed forces, beginning with a clear definition of its role followed by the influx of sufficient funding for operational changes and basic living conditions for its service members, this crisis will become more severe and put in jeopardy the very stability of Russian society.

TABLE OF CONTENTS

| | |
|--------------------------------------------------------------------------------------------------------------------------------------------|-----------|
| ABSTRACT | 2 |
| LIST OF TABLES | 4 |
| RUSSIAN MILITARY REFORM SINCE THE COLLAPSE OF THE SOVIET UNION: HOW EFFECTIVE IS THE RUSSIAN MILITARY AS A FIGHTING FORCE?..... | 5 |
| SOVIET LEGACY | 5 |
| RUSSIAN ARMED FORCES BEGINNINGS | 9 |
| NAVAL FORCES..... | 10 |
| AIR AND AIR DEFENSE FORCES | 12 |
| ARMY GROUND FORCES | 12 |
| INDICATORS OF MILITARY EFFECTIVENESS | 15 |
| DOCTRINE..... | 15 |
| DEFENSE BUDGET | 19 |
| MANNING | 21 |
| LIVING STANDARDS | 25 |
| COMBAT READINESS AND CAPABILITY | 26 |
| OUTLOOK FOR THE FUTURE | 29 |
| ENDNOTES..... | 31 |
| BIBLIOGRAPHY | 36 |

LIST OF TABLES

| | |
|---------------------------------------------------------------|----|
| Table 1. Russian Naval Forces Equipment | 11 |
| Table 2. Russian Air Forces Equipment | 12 |
| Table 3. Russian Army Ground Forces Equipment | 13 |
| Table 4. Organization of Proposed Russian Mobile Forces | 14 |
| Table 5. Official Russian Defense Budgets by Function | 19 |
| Table 6. Russian Armed Forces Manning | 22 |
| Table 7. Percentage of Draft-dodgers | 23 |
| Table 8. Estimated Production of Major Weapons Systems | 28 |

RUSSIAN MILITARY REFORM SINCE THE COLLAPSE OF THE SOVIET UNION: HOW EFFECTIVE IS THE RUSSIAN MILITARY AS A FIGHTING FORCE?

For many of us who grew up during the Cold War we will always carry the image of the formidable Soviet Red Army. This was the enemy with who we could exchange world-annihilating nuclear weapons or face on the battlefield as the "Communist horde" flooded through the Fulda Gap to sweep over NATO forces. But as we discovered, this fearsome Soviet enemy was not indestructible. What is difficult to absorb is its death was the result of an insidious cancer untreated and unchecked, and not the result of honorable defeat on the field of battle. With the fall of the Soviet Union and the subsequent disintegration of the Soviet armed forces, it has fallen to Russia to pick up the remnants of the former Soviet forces and create a national Russian military force within the context of a new political and economic environment. The Russian armed forces' difficulties in redefining and restructuring itself as a separate and distinct fighting force reflect the greater struggle by Russia to take over the mantle held by the Soviet Union as a formidable world power. Today, the Russian armed forces find themselves in crisis. Russian senior officers are faced with debilitating problems in doctrine, manning, and the sustainment of military structure across the board. The solutions to these problems are at best, uncertain, within the context of a failing Russian economy and the indecisive support of Russian political leaders. This paper looks at the problems faced by the Russian armed, its current status as an effective fighting force and a prognosis for the future. The focus of this paper is on conventional forces – army, navy, and air forces. Strategic nuclear military doctrine and forces will be discussed only as they impact conventional forces reform decisions and development.

SOVIET LEGACY

The Soviet Union ceased to exist in December 1991. Five months later the Soviet army¹, the last remaining institution of that union, also died. In May 1992, Russian President Boris

Yeltsin announced the formation of the armed forces of the Russian Federation (RF).² Like a phoenix rising from the ashes, the Russian armed forces emerged with its roots firmly entrenched in the legacies of the Soviet military system. And as it soon became clear, those legacies had significant flaws. Unquestionably, one reason for the collapse of Soviet power was its excessive militarization.³ The Soviet Union was fully organized for war and constantly maintained a to immediately engage in total world war. The defining feature of the Soviet economy was its unceasing mass production of the necessities of warfare with an accompanying wartime surge production capacity.

Because of this priority focus on the growth of the Soviet military and its constant modernization it was not surprising that the most dynamic aspect of Soviet military doctrine was its military-technical side. This was symbolized, for instance, by the expansion of Soviet strategic nuclear forces, the developing "numbers" asymmetry in tanks and aircraft, and the deployment of SS-20 intermediate-range missiles. This militarization took a massive percentage of the Soviet gross national product (GNP). By 1988 it could no longer be hidden that this excessive militarization was bankrupting the Soviet Union and the Soviet Union could no longer support it as it faced major upheavals then occurring in Eastern Europe symbolized by the fall of the Berlin Wall in 1989. This meant reducing the size of the Soviet armed forces, introducing a more defensive concept, and constructively engaging in arms-control negotiations. Military reform was officially initiated under then Soviet President Mikhail Gorbachev. His public statements on the development of a defensive posture, radical disarmament proposals, and unilateral force reductions raised many eyebrows and stunned many long time Soviet insiders and analysts. However, these steps, while enjoying a strong support from the Ministry of Foreign Affairs and some civilian defense experts, were not really supported by the military.⁴ All aspects of this dramatic military reform and the reasons behind it were exposed to the public. The concept of *glasnost* introduced by President Gorbachev not only opened the former Soviet Union to the world but exposed the Soviet military to its public. It brought Soviet civilians into a

host of military-technical and socio-political issues. Until then the Soviet leadership had "suppressed any and all attempts by society to glance into those secret corners where military police are born."⁵ With *glasnost* the true conditions of the Soviet Union's military forces were exposed and the picture to many was surprising and unexpected.

At the time of its collapse the Soviet Union had nearly four million servicemen in uniform. Of this number over 2.8 million were in the conventional forces. The remainder was assigned to strategic nuclear and "paramilitary" forces. Paramilitary troops performed border guard and internal security missions and were controlled by the Interior Ministry. A majority of these servicemen were drafted as part of a mandatory conscription program.

By 1990, the conscription system that fed the massive Soviet military machine was failing across the board. It had collapsed in the Baltic States, Armenia, and Georgia and was failing in Moldavia and Uzbekistan as these former Soviet states sought independence. In the autumn 1990 draft, the city of Moscow itself underfilled its quota by 35% (ie 4860 men). Before 1987, draft dodging was virtually unknown. In that year, 871 young men failed to report. By 1990, 135,000 out of an annual call-up of 650,000-750,000 had not turned up.⁶ Between 1988 and 1990, polls revealed that the percentage of young men prepared to defend their country had declined from 81 to 59 percent. This was spurred on further by published statistics that revealed the Army's carelessness with the lives of its soldiers. It was estimated that approximately 4000 soldiers died annually from accidents, violations of safety measures, etc. Particularly horrifying is the admission that 1% of deaths were due to *dedovshchina* (severe bullying, often amounting to torture) and 23-27% are due to suicide, often induced by *dedovshchina*.⁷

There was also an accelerating decline in the health, fitness, education and moral qualities of soldiers. Poor nutrition, hygiene standards and health care and an alcoholism pandemic had been present at least the last 20 years. Back in September 1982, the *Military*

Medical Journal reported that 'in the first three months following induction, there is a general trend towards infection, since it is recorded that 68% of soldiers have become ill'.⁸ In November 1990, *Sovetskaya Rossiya* reported that, over the last decade, nervous and psychiatric disorders amongst draftees had increased by 50%, internal diseases by 35% and eye defects by 23%; even in Moscow, every fourth recruit was said to be 'in poor health'. In 1989, 130,000 conscripts were either exempted from service or discharged prematurely on health grounds.⁹ In 1989, it officially admitted that 13% of draftees had prison records, though Defense Minister Yazov quoted a figure of 31.5% that had either done time or had run-ins with the police.¹⁰

Job dissatisfaction during the final years of the Soviet Union was endemic amongst officers, particularly those of junior rank. In 1989, 70 percent of those retiring prematurely were under 25, and 77 percent were described as efficient, conscientious and possessing initiative, with 90 percent rated as either excellent or good. An August 1990 poll revealed that only 40% of officers regarded their job as even satisfactory, and 25% wished to change their career. In 1991, the number of officers seeking early discharge matched the number of officers joining.¹¹

There are several reasons for this fall in motivation and morale in the officer corps. Foremost amongst them, and the cause of many of the social problems outlined below, is the loss of prestige that used to be attached to officer status. The decline of the Russian military prestige began during the first unsuccessful stages of the war with Afghanistan and continues even further today amid a chaotic economic and political climate hostile to any positive change. In 1989, as troops began to return from Afghanistan, they did not come home in glory, but in shame. They were not treated to a ticker tape parade or praise, but with general opposition and disgust.¹² Public opinion further declined in April 1989 when the armed forces were sent into Tbilisi, Georgia to quell protest and put down a riot aimed at the Soviet government. Twenty protesters were killed and the use of forces by the armed forces against Soviet citizens further contributed to the distrust and low opinion of the military.¹³ The Soviet officer went from being

regarded as the cream of society to being despised by much of the population as the representatives of a now hated old communist order, and in many areas as a member of an army of occupation. Physical attacks on officers increased. In 1989, 85 were killed by civilians, not in the line of duty but just because of their profession, and in the first quarter of 1990, another 21 were murdered and 189 injured.¹⁴

Homelessness represented another major problem. In December 1991, Major General Rutskoi estimated their number at over 400,000. Furthermore, at least 74,000 lived in the worst possible slum conditions – e.g., 22 families in a Leningrad hostel sharing two lavatories and wash basins and one kitchen (no hot water), with the children sleeping in ammunition boxes.

Pay rates were so low that regimental commanders earned half as much as city bus drivers. Officially, it was admitted that a married junior officer with two children lived below the poverty line. Yeltsin has promised a 90% pay rise in 1992, but with inflation at 200% in September 1991 and going up by 2-3% per week, this was a very short lived panacea, and, with all its other, higher, priorities for spending, the government was not able to keep officers' pay at an acceptable level.¹⁵

The physical, security and social needs of the soldiers and officers are no longer met. There is no longer a commonality of values or a shared sense of motivation. All of these failures within the Soviet Armed Forces would be turned over to the Russian Armed Forces upon its inception.

RUSSIAN ARMED FORCES BEGINNINGS

President Yeltsin issued a decree "Establishment of Russian Federation Armed Forces" on 7 May 1992. From the time of President Yeltsin's decision to establish an autonomous military organization, an intense debate took place in Russia about the missions, and the table of organization and equipment of these new Russian Armed Forces. Within the former Soviet Union, the Russian Federation represented about 80% of the aggregate 'weight' of the USSR in

military power and military-industrial capability.¹⁶ Even before Yeltsin's decree Russia had claimed all troops and facilities based in and outside of the borders of the former USSR.

On 18 May 1992, Yeltsin promoted Pavel S. Grachev to General of the Army and appointed him as the first defense minister of Russia. During his first interview, Grachev stated that the new military establishment would be based on the old Soviet armed forces.¹⁷ Despite Russia's attempt to hold on to former Soviet forces, it lost a high proportion of its modern military hardware and infrastructure to the newly independent Eastern European states such as the Baltic States and Ukraine. The extent of the reductions in weapons holdings was considerable. Still Russian military leadership was faced with the overwhelming task of redeploying hundreds of thousands of men and tens of thousands of equipment items back into Russia, which largely lacked the infrastructure and facilities to accommodate them. Even while Russia was trying to accomplish this repatriation, it also was attempting to define itself which included downsizing, reorganizing to meet post-Soviet realities and changing the very nature of its manning. These simultaneous tasks had to be undertaken under conditions of active opposition from the old Soviet guard,, continuing political uncertainty, popular antipathy at home, chronic underfunding and a collapsed morale within the forces themselves. Moreover, they had to be tackled with no clear direction or goal. Many Russian force planners believed that the former Soviet armed forces that they had inherited were inadequate to meet to the needs of the Russian Federation. They were too big, too heavy on armor, too centralized, often with poor tactical training and low morale.¹⁸

NAVAL FORCES

Since 1992, the Navy has struggled to define itself in the context of Russia's definition of threats and its focus on the 'near abroad'¹⁹ Of all the problems currently facing the Russian Navy, arguably the greatest is that of establishing a rationale for its development and deployment. Although the strategic threat to Russia's open-sea frontiers in the North and the

Far East cannot be discounted, it is less pressing than in the past. The current preoccupation with the 'near abroad' reflects Russia's primary concern with the threat of instability close to her land frontiers, particularly in the south. These are areas where the Navy can have little influence, and its importance has consequently be downgraded in favor of the Army, the Air Force and the internal security forces.²⁰

Table 1: Russian Naval Forces Equipment²¹

| | 1990 (Soviet Forces) | 1992(1) | 1994 | 1996 | 1998 |
|--------------------------------------------------------------------|-------------------------|---------|-------|------|------|
| (2) | | | | | |
| Submarines | 323 | 250 | 185 | 133 | 98 |
| Carriers | 5 | 4 | 2 | 1 | 1 |
| Cruisers | 43 | 33 | 25 | 24 | 17 |
| Destroyers | 31 | 26 | 22 | 21 | 13 |
| Frigates | 148 | 129 | 112 | 120 | 13 |
| Patrol/Coastal Craft | 395 | 305 | 145 | 134 | 124 |
| Naval Aviation | 1070 | 2,390 | 1,034 | 646 | 716 |
| Aircraft | 750 | 1,100 | 783 | 396 | 329 |
| Helicopters | 320 | 290 | 251 | 250 | 387 |
| Notes: 1. A separate Russian Armed Forces was established May 1992 | | | | | |
| 2. Weapon systems in storage not included in totals | | | | | |

In 1993, a 10-year program for 1993-2003 was drawn up for the Navy focused on consolidation, rationalization, and reorientation.²² The Russian Navy has strongly resisted attempts by the Air Force to take over responsibility for naval aviation 'Backfire' bombers under the arguments for reorganization and rationalization. With their powerful standoff missiles, these aircraft are crucial to the Russian Navy's anti-carrier strategy.²³ The dramatic decline in the numbers and operations of Russian surface forces over the past few years has driven the Navy

to rely heavily on naval aviation and submarines to meet its long-standing mission of defeating an equivalent or stronger enemy surface fleet, namely the U.S. and/or NATO.

AIR AND AIR DEFENSE FORCES

TABLE 2: Russian Air Forces Equipment²⁴

| | 1990 (Soviet Forces) | 1992(1) | 1994 | 1996 | 1998 |
|---------------------------|-------------------------|---------|-------|-------|-------|
| (2), (3) | | | | | |
| Long-range Aviation | 565 | 581 | 378 | 191 | 155 |
| Tactical Aviation | 4,925 | 4,025 | 1,675 | 1,440 | 1,490 |
| Air Defense Aircraft | 2,325 | 2,215 | 1,220 | 825 | 965 |
| Air Defense Msl Launchers | 8,650 | 7,000 | 3,500 | 2,350 | 2,150 |
| Transports | 1,869 | 1,820 | 650 | 600 | 590 |

Notes: 1. A separate Russian Armed Forces was established May 1992
2. Weapon systems in storage not included in totals
3. Training aircraft no included in aircraft totals

The main missions of the Russian Air Force (RuAF) are categorized under the headings of engaging enemy groupings, covering friendly forces, supporting troop deployments, supporting actions by mobile forces, and conducting reconnaissance and electronic warfare.²⁵ These missions expanded in 1997 when the Air Force and Air Defense Forces were combined into a single service.²⁶

ARMY GROUND FORCES

In the original planning, the Russian ground forces would undergo the greatest degree of change. Russian ground forces for future war were seen as a combination of immediate reaction forces, rapid deployment forces, fortified regions, Spetsnaz, highly maneuverable forces and mobilized reserves.²⁷ The primary ground forces would be what General Grachev,

Russian Defense Minister, referred to as 'Mobile Forces'.²⁸ The proposed outline for the organization of these mobile forces included both an 'immediate reaction force (IRF) and a 'rapid deployment force' (RDF).²⁹ The mission of the IRF would be to move rapidly to expected or developing crisis areas and exert necessary force to contain or resolve the crisis.³⁰ The IRF would have the 'highest degree of combat readiness' and would be permanently capable of instant deployment without borrowing assets from other formations. It was to be composed of forces listed in Table 4.

TABLE 3: Russian Ground Forces Equipment³¹

| | 1990 (Soviet Forces) | 1992(1) | 1994 | 1996 | 1998 |
|---------------------------|-------------------------|---------|--------|--------|--------|
| (2), (3) | | | | | |
| Main Battle Tanks | 61,500 | 29,000 | 19,500 | 16,800 | 15,500 |
| AIFVs/APCs | 78,000 | 51,000 | 35,000 | 25,700 | 26,300 |
| Artillery | 66,880 | 22,000 | 21,300 | 18,400 | 15,700 |
| SSM Lnchrs (nuc-capable) | 1,723 | 900 | 600 | 144 | 316 |
| SAM Launchers | 4,960 | N/A | 2,305+ | 2,300 | 2,300 |
| Helicopters | 4,500 | 3,200 | 2,600 | 2,450 | 2,300 |
| Attack | 2,050 | 1,100 | 1,000 | 950 | 1,000 |
| Transport/General Purpose | 2,390 | 2,080 | 1,600 | 1,500 | 1,300 |

Notes: 1. A separate Russian Armed Forces was established May 1992
2. Weapon systems in storage not included in totals
3. Equipment numbers do not include equipment holdings held by interior security or border guard units

The mission of the RDF would be to follow the immediate reaction force and supplement its efforts with heavy-duty combat forces. The RDF was seen as an "airmobile reinforcement force with heavy strike means, capable of being rapidly deployed and capable of supporting the limited rapid reaction force (i.e., the IRF) in any region of the country".³²

TABLE 4: Organization of Proposed Russian Mobile Forces³³

| | IMMEDIATE REACTION FORCES | RAPID DEPLOYMENT FORCES |
|----------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| GROUND FORCES | 5 Airborne Divisions 8 Independent Airborne Divisions 6 Motorized Rifle Brigades 1 Spetsnaz Brigade 3 SAM Brigades 12 Attack Helicopter Regiments Mobile Communications Center | 3 Army Corps 1 Tank Division 1 Motorized Rifle Division 5 MLRS Brigades 3 Radio Intercept Battalions 3 Attack Helicopter Regiments 10 Communication Brigades 6 Ground Transportation Brigades 3 Bomber Divisions |
| AIR FORCES | 5-7 Fighter-Bomber Regiments 5 Bomber Regiments 2 Ground Attack Aviation Regiments 4 Military Airlift Divisions | 1 Air Army |
| NAVAL FORCES | 2 Amphibious Landing Battalions 5 Naval Infantry Battalions | |

The organization of remaining ground forces was to be shifted from the existing division-based towards a brigade-based structure. The positive advantages of this new concept were considered significant. With the development and deployment of combined arms brigades and battalions, the brigade-based structure offered a much more coherent environment which allowed for a flexible and decentralized engagement of forces with greater flexibility and strength. Moreover, the planned reduction in the overall size of the Russian armed forces rendered the division-based structure inappropriate for the now more likely conflict scenarios: medium- and small-scale operations.

Russian maneuver ground forces not in the immediate reaction or rapid deployment forces would be formed into corps, brigades, and combined arms battalions. Reserve forces, for the foreseeable future, looks to retain the same formations and organization originally established in the 1970s and 1980s. Their function is to provide necessary combat capability over time and to accept the brunt of fighting in the later stages of a war.

INDICATORS OF MILITARY EFFECTIVENESS

Upon his appointment in 1992 as Defense Minister, Pavel Grachev, began the process of military reform with some initial success. However, these were only temporary gains and the situation has, in reality, worsened far beyond that of the Soviet era. Grachev set out to reform the military with the goal of making it a stable and predictable institution, while at the same time attempting to increase the abysmally low morale of the troops. To restore the viability of the Russian armed forces, Defense Minister Grachev and his successors, Generals Rodionov and Sergeev, have had to take on the problems inherited from the Soviet era and new problems emerging with bringing forces back to Mother Russia.

DOCTRINE

The Russia Federation published its first military doctrine in November 1993.³⁴ The new doctrine, while retaining much of the old Soviet doctrine, did differ in a number of ways.³⁵ Initially, the new document went to great length to abandon the view of potential adversaries created during the Cold War and the subsequent commitment to major conventional war. Second, it gave greater attention to the more realistic possibility of local wars and the need to prepare for them. These new views on war have had a radical impact on the organization, equipping and training of the armed forces. The intent by Russian military strategists to present the armed forces of Russia should not now be seen as a threat to anyone, while at the same time sufficient to rebuff any form of aggression. The doctrine defines the armed forces as defensive in orientation.³⁶

The armed forces were to be structured on the principle of 'defense sufficiency' -- the maintenance of sufficient forces to deter or repulse aggression but which did not allow for large-scale offensive actions without additional mobilization.

To meet this criterion, the armed forces would be organized in three groupings:

- Permanently ready forces, limited in numbers, stationed forward in theaters of operation (TVDs) to counter local aggression (earlier identified as Immediate Reaction Forces – IRF)

- Mobile reserves (rapid reaction forces - RDF) held farther back. These forces also discussed earlier would be capable of deploying rapidly to any region to assist the ready forces in repulsing medium-level aggression.

- And finally, strategic reserves would be created during a period of threat and during wartime to conduct large-scale operations.³⁷

This military doctrine also laid out a new perception of threats. The end of the Cold War meant that Russia had to depart from the relatively 'stable' world in which it has once existed – where the "enemy" was known and the rules of engagement and type of warfare was understood and routinely exercised. Armed conflicts and local wars – now involving potentially low-intensity, guerrilla-type warfare -- and an increasing threat of the proliferation of weapons of mass destruction, missile delivery means, and conventional weapons were seen as very real possibilities. Threats to Russian security were placed in three categories:³⁸

- External threats: to the West, NATO expansion to the borders of Belarus and the Ukraine and into the Baltic States. In the Caucasus, Turkey and Iran vying for power and influence. To the East, is unpredictable China. To the South, in Central Asia, is the threat of Islamic extremism.

- Internal threats: disputes arising within the borders of Russia involving territory and/or resources, ethnic and religious quarrels and personal relations between political leaders leading to conflict. Also included were occurrences of civil disobedience or threats to the constitutional government.

- Other threats: Russia also viewed as a 'serious source of conflict' the violation of the rights of the citizens of Russia or those individuals that ethnically or culturally identify

themselves with Russia in the former republics of the Soviet Union. Russia has also taken the position to support third countries against perceived political threats in order to achieve domination or, as a minimum, destabilize the threat. An example of this is the case of Georgia. Russian air and naval forces during 1992 helped a region in Georgia, Abkhazia, to secede and to expel ethnic Georgians from that region. Russian peacekeepers were interposed between Abkhazia and Georgia proper to prevent the return of ethnic Georgians refugees. Russia has also encouraged similar secessionist movement in other Georgian regions, Adjara and South Ossetia and then, introduced four Russian "peacekeeping" garrisons near Georgia's main cities and placed Russian border guards on the frontier between Georgia and Turkey.

As a result of the changing nature of potential threats, Russian military doctrine has had to relook at least conceptually at some difficult issues in paradigm-breaking ways: nuclear deterrence at strategic and tactical levels, reorganization of ground forces to a corps and brigade structure, transition to a professional army, introduction of high-technology military concept of war supported by advanced weaponry, and the resulting decline in the role of heavy weapons.³⁹

The concepts (or goals) presented in Russia's 1993 military doctrine focusing on high-technology warfare and the organization of forces based around flexible, rapid-response "mobile forces" by most military analysts were the right answers for the threats defined by Russia. However, Russia cannot realistically fund the required research and development efforts or the heavy costs of reorganization to any significant degree. As a result, the blueprint for the Russian armed forces presented in its military doctrine is on indefinite hold.⁴⁰

The 1993 military doctrine was seen as a temporary document that would be followed by a continuing evolution of doctrines as the government of Russia itself solidified its concepts of statehood and national security. However, it was not until this year that a new draft military doctrine was published following the publication of a new national security concept in 1999. Still not ratified, the new draft military doctrine continues much of the same basic concepts

presented in the 1993 doctrine. The major difference is in the threshold laid down for the use of nuclear weapons and what it implies about the perceived effectiveness of and priority given to conventional forces. In the new draft doctrine Russia reserves the right to use nuclear weapons in response to the use of nuclear or other mass destruction weapons against it or its allies, *and also in the response to large-scale aggression involving conventional arms in situations critical for the national security of Russia and its allies.*⁴¹ This willingness to use nuclear weapons in response to an attack by conventional forces points out Russia's recognition that it can no longer ward off a conventional NATO attack without using nuclear weapons.⁴² Another difference between the draft document and the 1993 doctrine is the introduction of the term "military security" instead of "defense security". This change in terminology is based on the expansion of internal threats perceived by Russia including attempts to overthrow the constitutional government and illegal activities of extremist organizations, organized crime, and terrorism. The number of tasks assigned to the military have declined – Russia will no longer oppose any/all international threats, but will respond only to immediate threats to state security. The draft doctrine stipulates that Russian Armed Forces will only carry out local combat operations in a single theater of operations.

What is clear is that Russia's military doctrine is a political document that details the national and security interests of the state and provides a blueprint for reform of the armed forces. While the 1993 and 2000 draft doctrines appear to accurately capture the appropriate military answers to the threats to and national interests of Russia, the ability of the state to actively begin to work these answers is severely limited. Given the massive problems plaguing the military in terms of morale and combat effectiveness, as well as the profound economic problems facing Russia, the ability of the military to meet the blueprint outlined in military doctrine will remain inadequate for the foreseeable future.⁴³

DEFENSE BUDGET

Obtaining a clear picture of the Russian Defense Budget is an extremely difficult and tedious process; military spending is not exclusive to the defense budget but distributed throughout Russia's ministerial and other governmental spreadsheets. While the official defense budget accounted for 16 percent of projected government spending in 1998, actual allocations to fund military-related activities accounted for up to a third of government spending.⁴⁴

TABLE 5: Official Russian Defense Budgets by Function⁴⁵

| | 1992 | % | 1994 | % | 1996 | % | 1998 | % |
|--------------------------------------------------------------------------------------------------------|------------|------------|---------------|------------|---------------|------------|---------------|------------|
| (in millions of rubles) | | | | | | | | |
| Personnel, O&M | 499 | 55.4 | 22,105 | 54.4 | 41,120 | 51.3 | 44,527 | 54.5 |
| Procurement | 185 | 20.5 | 8,442 | 20.8 | 13,213 | 16.5 | 17,408 | 20.8 |
| R&D | 75 | 8.3 | 2,433 | 6.0 | 6,475 | 8.1 | 10,800 | 13.2 |
| Infrastructure | 122 | 13.5 | 4,778 | 11.8 | 7,637 | 9.5 | 3,300 | 4.0 |
| Pensions | N/A | | 1,994 | 4.9 | 9,899 | 12.3 | (1) | |
| Nuclear, Other | 21 | 2.3 | 874 | 2.2 | 1,842 | 2.3 | 2,095 | 2.6 |
| Military Reform | N/A | | N/A | | N/A | | 3,995 | 4.9 |
| TOTAL | 901 | 100 | 40,626 | 100 | 80,185 | 100 | 81,765 | 100 |
| (1) pensions were moved to the social security line with the August 1996 law on budget classifications | | | | | | | | |

However the accounting is accomplished, it has been clear since 1992 that Russia's defense budget has been insufficient to meet requirements for the military forces. Russia's

Ministry of Defense has consistently complained that it does not have sufficient funds to pay its bills, maintain international commitments for disarmament, support the overwhelming military-industrial complex (MIC), and accomplish much needed military reforms. The reasons for this are rooted in the Soviet legacy.⁴⁶ "The USSR was not merely a state with an impressive war machine. The state itself was a war machine, with every aspect of its organization geared towards the mobilization of massive economic and military potential to conduct world war."⁴⁷ The Russian leadership has recognized that continuing this policy is destructive to the Russian economy and has significantly reduced defense spending and to convert the economy from its suffocating Soviet program. According to most Russian analysts and a majority of press reporting/publications this has been a disaster for the military. In 1995, the military budget was approved for 111 trillion roubles. The military actually received only 44 trillion.⁴⁸ In 1994, Defense Minister Grachev characterized the 1994-95 defense budget as "ruinous" and "criminal" and went as far as warning Russian leadership of a collapse in the morale, combat readiness and mobilization base of the armed forces.⁴⁹ This situation has not improved but become steadily worse over the years. In 1994, the Navy's Pacific Fleet debts were assessed at 30 million roubles. Deliveries of fuel and lubricants virtually ceased, and the support structure serving the fleet was on the verge of a complete standstill.⁵⁰ Salaries for officers serving in the Transbaikal and Far Eastern military districts covered only 25-30% of the minimum living costs in those regions. While pay increases were being awarded at roughly six monthly intervals, these increases have rarely kept up with inflation. Today pay is often two to three months or more in arrears, a disaster in Russia's rising inflation. In 1990 on the verge of the collapse of the Soviet armed forces, a regimental commander earned half as much as a city bus driver. In 1994 to current times this situation continues; a major general is paid roughly one third as much as an unskilled autoworker.⁵¹ In September 1994, the electric company cut off the power to Russia's strategic missile forces because of non-payment of bills.⁵² In 1999, a Russian army

unit took a local electrical facility hostage because it had cut power to the military installation because the unit's failure to pay its bills.

As the pressure on the defense budget continues, the military will have to continue to make hard decisions between paying and housing its soldiers, buying new equipment or conducting military operations. The failure of the defense budget to meet the requirements of Russia's armed forces points to the failure of planners to devise an effective defense economic program based on the following factors:

- The defense budget is unrealistic and cannot be maintained
- Substantial military costs and expenditures lie hidden in other parts of the Russian budget
- By any standard, Russia is still excessively militarized, with a disproportionate number of people under arms relative to its population
- Russia has not yet overcome the problem of reconciling its military aspirations with its economic realities.⁵³

That this situation will be resolved in near future is unrealistic. Until Russia acknowledges its limitations and in turn defines the role of the military in terms of clear Russian national objectives, the armed forces will remain unable to realistically delineate and maintain the force structure and military-industrial complex required to meet these objectives. In the absence of this clear strategic guidance, the defense budget will be driven by economic expediency – putting out fires and plugging holes in the dam. Shortage of funds is therefore the most serious hurdle to positive military reform and it doesn't appear this situation will significantly change in the foreseeable future.

MANNING

Since its formation in 1992, the Russian armed forces have experienced extreme manpower shortages across all ranks. The armed forces manpower numbers for conventional forces have dropped from a force of roughly 2.4 million in 1992 to approximately 810 thousand servicemen in 1998. Some of this reduction was a result of the drawdown plan devised with the fall of the Soviet armed forces and its transfer to Russian control. At the same time, there are serious indicators that Russia is failing in its recruiting and retaining the quality force it requires. These indicators include the declining attractiveness of military service, the increasing opportunities for service deferments and the rapidly growing number of young men avoiding the mandatory draft (draft-dodging).

TABLE 6: Russian Armed Forces Manning⁵⁴

| | 1990 (Soviet Forces) | 1992(1) | 1994 | 1996 | 1998 |
|----------------------------|-------------------------|------------------|------------------|----------------|----------------|
| Conventional Forces | | | | | |
| Army | 1,473,000 | 1,400,000 | 780,000 | 460,000 | 420,000 |
| Navy | 410,000 | 320,000 | 295,000 | 190,000 | 180,000 |
| Air Force/Air Defense(2) | * | * | * | * | 210,000 |
| Air Force | 420,000 | 300,000 | 170,000 | 145,000 | * |
| Air Defense | 500,000 | 356,000 | 205,000 | 175,000 | * |
| TOTAL | 2,803,000 | 2,376,000 | 1,450,000 | 970,000 | 810,000 |
| Strategic Nuclear Forces | 376,000 | 181,000 | 167,000 | 149,000 | 149,000 |
| Paramilitary Forces(3) | 530,000 | 520,000 | 280,000 | 352,000 | 543,000 |

Notes: 1. A separate Russian Armed Forces was established May 1992

2. Air Force and Air Defense Forces were merged under a single Air Force Command in March 1998

3. Paramilitary troops include border troops and internal security troops under the Interior Ministry

Manning for the Russian armed forces is primarily achieved through conscription, as it was during Soviet times. The breakdown of the conscription system and the failure to initiate a successful plan for recruiting professional servicemen have resulted in manning averaging at

only about 60 percent across all units. This system is failing to meet necessary numbers for the indicators already identified coupled with changes in draft laws and the push by the Russian government to establish a contract-based "professional" military. The large draft shortfalls can be traced back to February 1993, with the passing of the "Law on Military Service" legislation. This law spelled out approximately 25 educational, health and family exemptions available to draft-age young men could legitimately and legally avoid military service.⁵⁵ These exemptions are so broad that the number of those eligible for exemptions is roughly 80 percent of the draft pool.⁵⁶ This leaves only about 20 percent left in the draft pool, many of whom turn out to be less than top quality for either educational or health reasons. According to some Russian experts, the Russian armed forces, particularly the Army is now comprised largely of "illiterate workers and peasants".⁵⁷ Only 76 percent of soldiers called up in 1994 had completed their secondary education. Even more serious, an increasing number of draftees are entering the service with drug and alcohol problems and criminal records.

For those that are ineligible for exemptions, draft dodging has proven to be a very successful alternative. Russia has shown it is unwilling to aggressively pursue these people. The table below shows the increasing number of draft-dodgers for the years 1996 and 1997, and those percentages were projected to grow in 1998 and 1999.

TABLE 7: Percentage of Draft-dodgers⁵⁸

| Year | Draftees | Draft-dodgers | % evading draft |
|------|----------|---------------|-----------------|
| 1996 | 225,000 | 31,000 | 13.8% |
| 1997 | 188,000 | 40,000 | 21.3% |

In 1993, in anticipation of draft shortfalls, then President Boris Yeltsin announced his intent to "professionalize" the military. Russia introduced a voluntary, contractual type of options for individuals eligible to serve. Because recruitment offers better pay and better benefits, by the end of 1993, more than 120,000 Russian citizens had signed up.⁵⁹ In January 1994, President Yeltsin called for an additional 150,000 contracted troops for the year. In total, this would have brought the army to 400,000 (32 percent of the non-officer forces) serving under contract.⁶⁰ However, Russian officials quickly discovered that a majority of these contract soldiers possessed criminal records, were poorly educated, and were of generally poor quality. They had joined the military because there was nothing else for them. From the initial recruiting numbers, 20,000 of the new recruits had their contracts terminated in the first eight months of service because of criminal activity.⁶¹ In 1994, roughly 25 percent of contract service members were discharged for discipline problems or because they were found unsuitable for military service.

Because of these difficulties in recruiting and subsequent manpower shortages, military units are finding themselves struggling to maintain normal training and operational requirements. There are reports of conflict between conscripts and contract servicemen who are on much higher rates of pay. (In June 1994, a contract serviceman's monthly pay was 144,000 roubles while that of a conscript was 9,800). In theory, the contract servicemen should be better trained but, in practice, the army has found that most of their volunteers are in their late twenties or early thirties and have forgotten most of their training as teenage conscripts.

Manning problems are also a major cause for concern as air regiments suffer a depletion of expertise as a result of aviators and engineers opting to leave the service. Shortages of skilled manpower are rapidly taking on epidemic proportions at a time when a high standard of professional skills is required to master the new technologies that are dominating aerial warfare.

Another serious aspect of manpower problems plaguing the Russian military is the plight of the Russian officer corp. Officers are becoming disillusioned with the role of the military, caused by the changing mission and the increasing use of the armed forces in roles traditionally filled by other troops. Many officers and their families have no housing and are living in tents, deadlined helicopters and schoolhouses. Society has withdrawn the respect and prestige traditionally accorded to officers and junior officers are resigning from the army in droves. Older officers are being forced into premature retirement. The value of an officer's pay has declined sharply and many officers have not been paid for months.⁶² Many officers (like most enlisted service members) have come to regard self-preservation, or better still, self-enrichment, as their primary goal. Officers openly engage in commercial activities in their military installations.⁶³ In 1995, a survey was conducted of mid-career officers attending the Gagarin and Zhukovsky service academies. Of those surveyed, 80% polled were pessimistic about the future, and 87% were disturbed about the decline in the prestige of military service. Most were ambivalent about future military service, and 40% wished to resign. This leaves only 3% expressing an intense desire for continued service.⁶⁴

LIVING STANDARDS

Today, the Russian government is not meeting the most basic needs of pay, food, shelter, and adequate medical care required by Russian service members, contributing to shrinking morale, desertion, draft evasion and, most disturbingly, low combat readiness.⁶⁵

According to the Spartak Arzhavkin, the Russian armed forces' trade union, the draft budget for 1997 satisfied only a third of the army's basic subsistence requirements and resulted in a deficit of 3,400 billion roubles in wages for the army's civilians. The union representative went further to state that as of 1997 the government owed every officer over six million roubles. The massive withdrawal of troops from Eastern Europe and former Soviet republics since 1992 has left at least 155,000 officers and their families without adequate housing. That number

grew to 400,000 by the end of 1995.⁶⁶ In the mean time they are living in the worst slum accommodation if they are lucky and in tank sheds, offices and tents if they are not. Even where housing is provided, in some cases basic utilities such as plumbing or electricity are not available. Many housing installations do not include basic needs such as childcare, schools, hospitals and shops. An equally pressing problem often overshadowed by the housing issue is the problem of food shortages. As one author, David C. Isby, wrote, "...it is clear that hungry men with Kalashnikovs present a potent threat to governments"⁶⁷ This lack of food, specifically for the military, is occurring for two main reasons. First, is, as with everything else, the lack of adequate funding for basic needs. Second, is the privatization of former Soviet military food processing plants. These plants previously provided food for a majority of the military. Now, either because of the lack of raw materials or because they are holding food back for barter or for sale at more lucrative prices, food from these plants are not been made readily available to the armed forces.⁶⁸

COMBAT READINESS AND CAPABILITY

As a result of the crises in funding, the ability for the armed forces to perform basic functions has been unquestionably degraded. The failure of the armed forces to recruit quality personnel and then adequately maintain, equip and train them has resulted in 70 percent of officers assessing their troops as unsatisfactory for combat. Reform is on hold, units do not train, pilots do not fly, equipment is not maintained, and soldiers are hired out by commanders to work in local factories and farms to earn money to feed their military units.⁶⁹ War reserve stockpiles are continuously being depleted because of the lack of supplies, especially fuel. There was not a single division scale exercise held between 1993-1995.⁷⁰ In one instance the fuel problem became so acute in the air defense forces that one commander, with fuel levels at only 30-50 percent of required levels in his fighter units, pledged his personal word of honor to

get 26,000 tons of fuel on credit, and now owes 11 billion roubles to the fuel company. The availability of fuel jeopardizes both training and operational missions. The problems faced by the Navy are symbolic of problems across the services. For the Navy, nationwide shortages of fuel have limited its ability to perform its missions. Out-of-area deployments are now comparatively rare and the operations of the largest ships, all of which are heavy consumers of fuel oil, have been severely curtailed.⁷¹ The dislocation and fragmentation of the navy's construction and support infrastructures have further hampered naval operations. The loss of the Black Sea shipyards, together with the extensive network of naval bases, training installations and naval airfields in the Crimea, has had far-reaching effects. Additionally, the shortage of trained personnel, together with a drastic reduction in seetime due to the serious fuel shortages already identified, has further resulted in more frequent accidents at sea, thereby exacerbating the backlog of shipyard repair work.⁷² A vicious cycle. The naval infantry remain largely to strength but lack the funds to practice the marine assaults for which they are tasked much less the air-mobile operations Moscow hoped to see them adopt under the concept of "mobile forces". As the 1994-96 Chechen war demonstrated, they are little more than stopgaps, filling in for the regular army's lack of effective and reliable light infantry units.⁷³

Funding for weapon systems development and procurement, as with everything else, has taken a serious decline over the last eight years. There are a number of long-term development programs for aircraft, naval ships, ground equipment and communications which have now reached pre-production status but can go no further until long-deferred orders placed by the Russian armed forces receive funding. As of 1995 the government owed the defense industry over 4 trillion roubles. That number has only increased in following years.

TABLE 7: Estimated Production of Major Weapons Systems

| | 1990 (Soviet Union) | 1992 | 1994 | 1996 | 1997 |
|-----------------------|------------------------|------|------|------|------|
| Main Battle Tanks | 1,600 | 500 | 40 | 5 | 5 |
| Inf Fighting Vehicles | 3,400 | 700 | 380 | 250 | 350 |
| SP Artillery | 500 | 200 | 85 | 21 | 10 |
| Bombers | 40 | 20 | 2 | 1 | 0 |
| Fighters/FGA | 430 | 150 | 50 | 25 | 35 |
| Transport Aircraft | 120 | 5 | 5 | 3 | 0 |
| Helicopters(1) | 450 | 175 | 100 | 75 | 70 |
| Submarines | 12 | 6 | 4 | 2 | 2 |
| Major surface ships | 2 | 1 | 0 | 1 | 0 |

Note: (1) Includes civilian production

Source: UK Ministry of Defense

Fielded equipment is running up against maintenance and repair problems, because of a lack of repair facilities, spare parts and qualified maintenance technicians. This is as equally true for the Air Force and Army as it is for the Navy. One of the most pressing problems for the Air Force is the difficulty of achieving aircraft operational reliability. According to former Chief of the General Staff of the Russian Air Forces, Colonel General Malyukov, procurement problems are a "headache" as the aerospace and defense industries degenerate in the harsh Russian economic climate. Also is the shortage of combat trainers, modern simulators and computer hardware.⁷⁴ Understaffing in engineering and technical departments has also contributed to the shortage of operational aircraft. The corollary is a desperate shortage of flying hours. Russian aviators are flying at least two and a half times less than is required to maintain any sort of flying currency – roughly 60 percent of pilots receive no systematic flight training and are only logging roughly 25-30 hours per annum flight time compared to minimum 120-130 hours for NATO pilots. For the Army, at least 90 percent of equipment is obsolete⁷⁵ -- only 20% of the tank fleet is currently assessed as usable. One third of all artillery systems and infantry fighting vehicles

need immediate overhaul, and it is believed that almost half the strike helicopter force is ineffective because of maintenance and logistic problems.⁷⁶ As a result realistic and routine training has become all but impossible in most units.

OUTLOOK FOR THE FUTURE

Without a major program to rehabilitate and reform the armed forces, beginning with a clear definition of its role followed by the influx of sufficient funding for operational changes and adequate living conditions for its service members, this crisis will become more severe and jeopardize the very stability of Russian society. The Russian Armed forces today cannot successfully fight a modern enemy equipped with the latest technology, such as NATO or the United States. The Russian Army is near collapse and all its efforts are directed to survival and to preserving Russia's immediate security issues. The Russian vision of future war as outlined in its military doctrine, although sound in the long-term, may be the wrong vision for the Russian Army in the short term. Russia continues to articulate high-technology concepts and programs but cannot realistically develop and apply them to the armed forces due to lack of funding and present quality of forces. Adequate, trained, quality manpower is the indisputable foundation of any military's combat success. Based on Russia's published military manpower requirements, it is undermanned and the quality of its service members is highly questionable on several levels. More serious is the apparent disillusionment and breakdown of the Russian officer corps. Much of Russia's manpower problems are of its own making. Until it defines, again, the role of the Russian military which then allows the military to accurately determine the size of manpower it requires and can realistically maintain within the Russian economic environment, the problems with military conscription and recruiting will continue. In the short term, it is hard to see a modern, high-technology threat to Russia's borders, but it is easy to predict more guerrilla and irregular conflicts.⁷⁷ Russia is currently involved in a guerrilla war with rebels in the Russian republic of Chechnya. As the Russian General Staff, Defense Ministry and the Russian

governmental leaders continue to debate military reform programs and the restructuring of the armed forces, the rank and file officers and soldiers of the Russian Federation are barely holding on to a fragile system bordering on a complete crisis situation.⁷⁸ More difficult to define and, therefore, address are issues of training standards, motivation, discipline and morale. Finally -- and most critical -- Russia must answer for itself the basic questions critical to defining the role, and therefore, the missions and structure of the armed forces.

Until aggressive, positive measures are taken to rectify the basic issues plaguing the Russian military at its core, far reaching reforms will never take hold and the ability of the Russian Armed Forces to effectively face the type of war it envisions will remain clearly in doubt.

ENDNOTES

¹ For the purposes of this research paper, the use of the term "army" is not restricted to ground forces but includes all conventional military services – ground, air and naval forces -- unless specifically stated.

² Charles J. Dick, "The Russian Army – Present Plight and Future Prospects," *Jane's Intelligence Review Yearbook 1994/1995*, 40.

³ Stephen J. Blank, "Crisis in the Russian Military Economy", *Jane's Intelligence Review Yearbook 1994/1995*, 36.

⁴ Andrei Raevsky, "Development of the Russian national Security Policies: Military Reform", *The Journal of Slavic Military Studies*, December 1993, 529.

⁵ Yu. Ya Kirshin, "The Army in a Democratic Society and Democracy in the Army", *The Journal of Slavic Military Studies*, March 1993, 3.

⁶ C.J. Dick, "The Crisis in the Soviet Military", *Jane's Intelligence Review*, February 1992, 72.

⁷ C.J. Dick, "The Crisis in the Soviet Military", *Jane's Intelligence Review*, February 1992, 72.

⁸ C.J. Dick, "The Crisis in the Soviet Military", *Jane's Intelligence Review*, February 1992, 73.

⁹ C.J. Dick, "The Crisis in the Soviet Military", *Jane's Intelligence Review*, February 1992, 73.

¹⁰ C.J. Dick, "The Crisis in the Soviet Military", *Jane's Intelligence Review*, February 1992, 73.

¹¹ C.J. Dick, "The Crisis in the Soviet Union", *Jane's Intelligence Review*, February 1992, 73.

¹² Robert W. Duggleby, "The Disintegration of the Russian Armed Forces", *The Journal of Slavic Military Studies*, June 1998, 1.

¹³ Robert W. Duggleby, "The Disintegration of the Russian Armed Forces", *The Journal of Slavic Military Studies*, June 1998, 6.

¹⁴ C.J. Dick, "The Crisis in the Soviet Union", *Jane's Intelligence Review*, February 1992, 74.

¹⁵ C.J. Dick, "The Crisis in the Soviet Union", *Jane's Intelligence Review*, February 1992, 74.

¹⁶ Andrei Raevsky, "Development of the Russian National Security Policies: Military Reform", *The Journal of Slavic Military Studies*, December 1993, 533.

¹⁷ Richard F. Starr, *The New Military in Russia: Ten Myths That Shape the Image* (Annapolis: Naval Institute Press), 1996,

¹⁸ Andrei Raevsky, "Development of the Russian National Security Policies: Military Reform", *The Journal of Slavic Military Studies*, December 1993, 534.

¹⁹ "Near abroad" is defined as those former Soviet countries that border Russia.

- ²⁰ John Jordan, "The Russian Navy in Transistion", *Jane's Intelligence Review*, April 1994, 158.
- ²¹ Data compiled from series of yearly publications, *The Military Balance*, International Institute For Strategic Studies, London:Brassey's.
- ²² John Jordan, "The Russian Navy in Transition", *Jane's Intelligence Review*, April 1994, 154.
- ²³ John Jordan, "The Russian Navy in Transition", *Jane's Intelligence Review*, April 1994, 157.
- ²⁴ Data compiled from series of yearly publications, *The Military Balance*, International Institute For Strategic Studies, London:Brassey's.
- ²⁵ Dennis J. Marshall-Hasdell, "The Russian Air Force – Prospects for the Future", *Jane's Intelligence Review*, December 1993, 533.
- ²⁶ Piotr Butowski, "Russia's New Air Force Enters a Tight Manoeuvre", *Jane's Intelligence Review*, May 1, 1999, 1.
- ²⁷ Lester W. Grau and Timothy L. Thomas, "A Russian View of Future War: Theory and Direction", *The Journal of Slavic Military Studies*, September 1996, 505.
- ²⁸ Pavel K. Baev, "Russian Military Thinking and the 'Near Abroad'", *Jane's Intelligence Review*, December 1994, 533.
- ²⁹ Andrei Raevsky, "Development of the Russian National Security Policies: Military Reform", *The Journal of Slavic Military Studies*, December 1993, 545.
- ³⁰ Lester W. Grau and Timothy L. Thomas, "A Russian View of Future War: Theory and Direction", *The Journal of Slavic Military Studies*, September 1996.
- ³¹ Data compiled from series of yearly publications, *The Military Balance*, International Institute For Strategic Studies, London:Brassey's.
- ³² Lester W. Grau and timothy L. Thomas, "A Russian View of Future War: Theory and Direction", *The Journal of Slavic Military Studies*, September 1996, 505.
- ³³ Lester W. Grau and Timothy L. Thomas, "A Russian View of Future War: Theory and Direction", *The Journal of Slavic Military Studies*, September 1996, 505.
- ³⁴ Russia actually drafted an initial military doctrine in 1992. However, this doctrine ultimately failed to meet the political and military expectations, and as a result was never ratified.
- ³⁵ Spencer D. Bakich, "The Military Doctrine of the Russian Federation: Working Document or Anachronism?", *Conflict Studies #301*, Research Institute for the Study of Conflict and Terrorism, July/August 1997, 2.
- ³⁶ Stephan D. Bakich, "The Military Doctrine of the Russian Federation: Working Document or Anachronism?", *Conflict Studies #301*, Research Institute for the Study of Conflict and Terrorism, July/August 1997,
- ³⁷ Charles J. Dick, "Counter-Blows in Russian Military Thinking", *The Journal of Slavic Military Studies*, September 1993, 397.

³⁸ Lester W. Grau and Timothy L. Thomas, "A Russian View of the Future War: Theory and Direction", *The Journal of Slavic Military Studies*, September 1996, 504.

³⁹ Spencer D. Bakich, "The Military Doctrine of the Russian Federation: Working Document or Anachronism?", *Conflict Studies* #301, Research Institute for the Study of Conflict and Terrorism, July/August 1997, 4.

⁴⁰ Pavel K. Baev, "Russian Military Thinking and the 'Near Abroad'", *Jane's Intelligence Review*, December 1994, 533.

⁴¹ Alexander Shaburkin, "The New Draft Military Doctrine Is Better Than the Old Military Doctrine", *Nezavisimaya Gazeta*, 5 February 2000

⁴² "Russia's Military Doctrine In the Wrong Direction", *Reuters News Service*, 3 April 2000

⁴³ Stephan D. Bakich, "The Military Doctrine of the Russian Federation: Working Document or Anachronism?", *Conflict Studies* #301, Research Institute for the Study of Conflict and Terrorism, July/August 1997, 25.

⁴⁴ *The Military Balance 1998/99*, The International Institute for Strategic Studies, London:Oxford University Press, 105.

⁴⁵ *The Military Balance 1998/99*, The International Institute for Strategic Studies, London:Oxford University Press, 104.

⁴⁶ Stephen Blank, "Crisis in the Russian Military Economy", *Jane's Intelligence Yearbook 1994/95*, 36.

⁴⁷ Charles J. Dick, "Past Cruelties Hinder The Taming Of The Bear", *Jane's Intelligence Review*, December 1998, 6.

⁴⁸ Stephan D. Bakich, "The Military Doctrine of the Russian Federation: Working Document or Anachronism?", *Conflict Studies* #301, Research Institute for the Study of Conflict and Terrorism, July/August 1997, 12.

⁴⁹ Mark Galeotti, "Decline and Fall – The Russian Defense Budget", *Jane's Intelligence Review*, September 1994, 386.

⁵⁰ John Jordan, "The Russian Navy in Transition", *Jane's Intelligence Review*, April 1994, 155.

⁵¹ Charles Dick, "The Russian Army – Present Plight and Future Prospects", *Jane's Intelligence Yearbook 1994/95*, 42.

⁵² Stephen Blank, "Crisis in the Russian Military Economy", *Jane's Intelligence Yearbook 1994/95*, 36.

⁵³ Michael Orr, "Peacekeeping and Overstretch in the Russian Army", *Jane's Intelligence Review*, August 1994, 364.

⁵⁴ Data compiled from series of yearly publications, *The Military Balance*, International Institute For Strategic Studies, London:Brassey's.

⁵⁵ Robert W. Duggleby, "The Disintegration of the Russian Armed Forces", *The Journal of Slavic Military Studies*, June 1998, 15.

⁵⁶ Charles J. Dick, "Past Cruelties Hinder the Taming of the Bear", *Jane's Intelligence Review*, December 1998, 5.

⁵⁷ Charles Dick, "The Russian Army – Present Plight and Future Prospects", *Jane's Intelligence Review Yearbook 1994/95*, 41.

⁵⁸ Mark Galeotti, "Crisis Continues for Russia's Army", *Jane's Intelligence Review*, June 1998, 4.

⁵⁹ Robert W. Duggleby, "The Disintegration of the Russian Armed Forces", *The Journal of Slavic Military Studies*, June 1998, 16.

⁶⁰ Spencer D. Bakich, "The Military Doctrine of the Russian Federation: Working Document or Anachronism?", *Conflict Studies #301*, Research Institute for the Study of Conflict and Terrorism, July/August 1997, 11.

⁶¹ Robert W. Duggleby, "The Disintegration of the Russian Armed Forces", *The Journal of Slavic Military Studies*, June 1998, 16.

⁶² Lester W. Grau and Timothy L. Thomas, "A Russian View of Future War: Theory and Direction", *The Journal of Slavic Military Studies*, September 1996, 514.

⁶³ Charles Dick, "The Russian Army – Present Plight and Future Prospects", *Jane's Intelligence Review Yearbook 1994/95*, 43.

⁶⁴ Robert W. Duggleby, "The Disintegration of the Russian Armed Forces", *The Journal of Slavic Military Studies*, June 1998

⁶⁵ Robert W. Duggleby, "The Disintegration of the Russian Armed Forces", *The Journal of Slavic Military Studies*, June 1998, 2.

⁶⁶ Benjamin S. Lambeth, "Russia's Wounded Military", *Foreign Affairs*, March/April 1995, 91.

⁶⁷ David C. Isby, "The Hungry Army", *Jane's Intelligence Review*, February 1993, 51.

⁶⁸ David C. Isby, "The Hungry Army", *Jane's Intelligence Review*, February 1993, 51.

⁶⁹ Lester W. Grau and Timothy L. Thomas, "A Russian View of Future War: Theory and Direction", *The Journal of Slavic Military Studies*, September 1996, 514.

⁷⁰ Stephan D. Bakich, "The Military Doctrine of the Russian Federation: Working Document or Anachronism?", *Conflict Studies #301*, Research Institute for the Study of Conflict and Terrorism, July/August 1997, 14.

⁷¹ John Jordan, "The Russian Navy in Transition", *Jane's Intelligence Review*, April 1994, 155.

⁷² John Jordan, "The Russian Navy in Transition", *Jane's Intelligence Review*, April 1994, 156.

⁷³ Mark Galeotti, "How Long is Russia's Arm?", *Jane's Intelligence Review*, August 1999, 9.

⁷⁴ Dennis J. Marshall-Hasdell, "The Russian Air Force – Prospects for the Future", *Jane's Intelligence Review*, December 1993, 532.

⁷⁵ Robert W. Duggleby, "The Disintegration of the Russian Armed Forces", *The Journal of Slavic Military Studies*, June 1998, 15.

⁷⁶ Charles Dick, "The Russian Army – Present Plight and Future Prospects", *Jane's Intelligence Review Yearbook 1994/1995*, 44.

⁷⁷ Lester W. Grau and Timothy L. Thomas, "A Russian View of Future War" Theory and Direction", *The Journal of Slavic Military Studies*, September 1996, 504.

⁷⁸ Robert W. Duggleby, "The Disintegration of the Russian Armed Forces", *The Journal of Slavic Military Studies*, June 1998,

BIBLIOGRAPHY

- "Analysis Of Incidents In Military Transport Aviation", translated by A. Ignatkin. *Na Boyevom Postu* (publication of the Moscow Air Force and Anti-Aircraft Forces District):2. 29 January 2000.
- The Russian Military In The 21st Century*, Strategic Studies Institute, U.S. Army War College, 3 June 1997.
- "Armored Vehicles Cannibalized In Russia", translated by A. Ignatkin. *Kommersant*:3. 2 February 2000.
- Azrael, Jeremy R. and Emil A. Payin, editors, *U.S. and Russian Policymaking With Respect to the Use of Force*. Rand Center for Russian and Eurasian Studies Center for Ethnopolitical and Regional Research, 1996.
- Baev, Pavel K., *The Russian Army in a Time of Troubles*, International Peace Research Institute, Oslo, Sage Publications, 1996.
- Baev, Pavel K., "Russian Military Thinking and the 'Near Abroad'". *Jane's Intelligence Review*, vol 6, no 12, December 1994, pp. 531-533.
- Baev, Pavel K. "Russia's Airpower in the Chechen War: Denial, Punishment, and Defeat". *The Journal of Slavic Military Studies*, vol 10, no 2, June 1997, pp. 1-18.
- Bakich, Stephen D. *The Military Doctrine of the Russian Federation: Working Document or Anachronism?*, Conflict Studies 301, Research Institute for the Study of Conflict and Terrorism, July/August 1997.
- Ball, Deborah Yarsike, "How Reliable Are Russia's Officers?". *Jane's Intelligence Review*, vol 8 no 5, May 1996, pp. 204-207.
- Ball, Deborah Yarsike, "How Safe is Russia's Nuclear Arsenal?". *Jane's Intelligence Review*, vol 11 no 12, December 1999, pp. 10-11
- Ball, Deborah Yarsike, "Russia's Strategic View: Reduced Threats, Diminished Capabilities". *Jane's Intelligence Review*, vol 10, no 11, November 1998, pp. 8-10.
- Ball, Deborah Yarsike, "Spurred by Kosovo, the Russian Military Is Down But Not Out". *Jane's Intelligence Review*, vol 11 no 6, June 1999, pp. 16-18.
- Berezkin, Lev, "Black Powder Is Still Dry". *Boyevaya Vakhta (publication of the Pacific Fleet)*, No 95:3. December 1999.
- Blank, Stephen J., "Crisis in the Russian Military Economy". *Jane's Intelligence Review Yearbook, 1994/1995*, pp. 36-39.
- Blank, Stephen J., *Russia's Armed Forces On The Brink Of Reform*, Strategic Studies Institute, U.S. Army War College, 16 March 1998
- Blank, Stephen J., "Russia's Draft Laws on Peacekeeping and Defence – Part 1". *Jane's Intelligence Review*, vol 7, no 4, April 1995, pp. 156-157.

- Blank, Stephen J., "Russia's Draft Laws on Peacekeeping and Defence – Part 2". *Jane's Intelligence Review*, vol 7, no 5, May 1995, pp. 201-204.
- Blank, Stephan J. and Jacob W. Kipp, editors, *The Soviet Military and the Future*, Greenwood Press, 1992.
- Bluth, Christopher, "Russia's Nuclear Forces: A Clear and Present Danger?". *Jane's Intelligence Review*, vol 9, no 12, December 1997, pp. 548-551.
- Bluth, Christopher, "Turmoil Looms for Russian Military". *Jane's Intelligence Review*, vol 8 no 10, October 1996, pp. 455-457.
- Butowski, Piotr, "New Weapons, Old wings: Russian Aviation's Way Ahead – Part One". *Jane's Intelligence Review*, vol 10 no 9, September 1998, pp. 9-13.
- Butowski, Piotr, "New Weapons, Old Wings: Russian Aviation's Way Ahead – Part Two". *Jane's Intelligence Review*, vol 10 no 10, October 1998, pp. 12-17.
- Butowski, Piotr, "Russia's Air Forces Face Up To Their Dilemmas, Part One". *Jane's Intelligence Review*, vol 9 no 10, October 1997, pp. 447-452.
- Butowski, Piotr, "Russia's Air Forces Face Up To Their Dilemmas, Part Two". *Jane's Intelligence Review*, vol 9 no 11, November 1997, pp. 498-504.
- Butowski, Piotr, "Russia's New Air Force Enters A Tight Manoeuvre", *Jane's Intelligence Review*, vol 11, no 5, 1 May 1999.
- Chernavin, Iuri, "The Status of the Army in Russian Society". *The Journal of Slavic Military Studies*, vol 9, no 4, December 1996, pp. 732-742.
- Chevychelov, Mikhail, Lt Colonel (retired), "A Pilot Cannot Help Flying". *Boevaya Vakhta (publication of the Pacific Fleet)*, No 95, December 1999, pp. 1-5.
- De Lionis, Andres, "How Elite Is Russia's Naval Infantry". *Jane's Intelligence Review*, vol 8 no 7, July 1996, pp. 298-302.
- Demurenko, Andrei V. and Timothy L. Thomas, "Toward Joint Planning and Conduct of Operations: A Russian-US Comparison". *The Journal of Slavic Military Studies*, vol 6, no 1, June 1993, pp. 208-220.
- Dick, Charles J., "A Bear Without Claws: The Russian Army in the 1990s". *The Journal of Slavic Military Studies*, vol 10, no 1, March 1997, pp. 1-10.
- Dick, Charles J., "Counter-Blows in Russian Military Thinking". *The Journal of Slavic Military Studies*, vol 6, no 3, September 1993, pp. 397-425.
- Dick, C.J., "The Crisis in the Soviet Military". *Jane's Intelligence Review*, vol 4 no 2, February 1992, pp. 72-75.

- Dick, Charles J., "Crisis in the Former Soviet Union". *Jane's Intelligence Review*, vol 4, no 9, September 1992, pp. 403-404.
- Dick, Charles J., "History Warns The West That Russia Cannot Be Ignored". *Jane's Intelligence Review*, vol 11 no 11, November 1999, pp. 10-12.
- Dick, Charles J., "Past Cruelties Hinder the Taming of the Bear". *Jane's Intelligence Review*, vol 10 no 12, December 1998, pp. 5-9.
- Dick, Charles J., "The Russian Army – Present Plight and Future Prospects". *Jane's Intelligence Review Yearbook 1994/1995*, pp. 40-45.
- Dick, Charles J., "Russian Views on Future War – Part 1". *Jane's Intelligence Review*, vol 5, no 9, September 1993, pp. 390-392.
- Dick, Charles J., "Russian Views on Future War – Part 2". *Jane's Intelligence Review*, vol 5, no 10, October 1993, pp. 451-453.
- Dick, Charles J., "Russian Views on Future War – Part 3". *Jane's Intelligence Review*, vol 5, no 11, November 1993, pp. 488-495.
- Dick, Charles J., "Russia's New Doctrine Takes A Dark World View", *Jane's Intelligence Review*, vol 12, no 1, 1 January 2000.
- Dick, C.J., "Soviet Military Doctrine – Preparing for the Future". *Jane's Intelligence Review*, vol 4 no 1, January 1992, pp. 33-36.
- "Division Of Labor In The Army: Some Wage War In Chechnya, Others Steal In The Rear Services", translated by Andrei Ryabochkin. *Tribuna*, 17 February 2000, p. 2.
- Downing, John, "The Status of the Russian Navy". *Jane's Intelligence Review*, vol 7 no 6, June 1995, pp. 243-245.
- Dronov, V., "There Can Be No Successes In Service Without Order". *Strazh Baltiki* (publication of the Baltic Fleet), 3 February 2000, p. 1.
- Duggleby, Robert W., "The Disintegration of the Russian Armed Forces". *The Journal of Slavic Military Studies*, vol 11, no 2, June 1998, pp. 1-24.
- Duncan, Andrew, "Russian Forces in Decline – Part 1". *Jane's Intelligence Review*, vol 8 no 9, September 1996, pp. 404-407.
- Duncan, Andrew, "Russian Forces in Decline – Part 2". *Jane's Intelligence Review*, vol 8 no 10, October 1996, pp. 442-447.
- Duncan, Andrew, "Russian Forces in Decline – Part 3". *Jane's Intelligence Review*, vol 8 no 11, November 1996, pp. 491-495.
- Duncan, Andrew, "Russian Forces in Decline – Part 4". *Jane's Intelligence Review*, vol 8 no 12, December 1996, pp. 540-544.

Duncan, Andrew, "Russian Forces in Decline – Part 5". *Jane's Intelligence Review*, vol 9 no 1, January 1997, pp. 14-18.

Duncan, Andrew, "Time of Consolidation for Russia's Military". *Jane's Intelligence Review*, vol 9 no 10, October 1997, pp. 453-456.

Frolov, Igor, "Conscripts Still Backbone of Russia's Armed Forces". *The Russia Journal*, 4-10 October 1999.

Galeotti, Mark, "Crisis Continues For Russia's Army", *Jane's Intelligence Review*, vol 10, no 6, 1 June 1998.

Galeotti, Mark. "Defence Dilemmas", *Jane's Intelligence Review*, vol 4, no 3, March 1992, pp. 98-100.

Galeotti, Mark, "The General Staff, the Defence Minister and the President". *Jane's Intelligence Review*, vol 6 no 6, June 1994, p. 242.

Galeotti, Mark, "How Long is Russia's Arm?". *Jane's Intelligence Review*, vol 11 no 8, August 1999, pp. 8-9.

Galeotti, Mark, "The Right Climate for Reform". *Jane's Intelligence Review*, vol 11, no 1, January 1999, pp. 8-9

Galeotti, Mark, "The Russian Defence Budget". *Jane's Intelligence Review*, vol 6 no 9, p. 386.

Galeotti, Mark, "Russia's Criminal Army". *Jane's Intelligence Review*, vol 11, no 6, June 1999, pp. 8-10.

Galeotti, Mark, "Russia's Grafting Generals", *Jane's Intelligence Review*, vol 10, no 4, 1 April 1998.

Galeotti, Mark, "Russia's Military Under A New Master". *Jane's Intelligence Review*, vol 9, no 9, September 1997, pp. 387-391.

Galeotti, Mark, "Russia's Nuclear Attack on Its Conventional Forces". *Jane's Intelligence Review*, vol 10, no 12, December 1998, pp. 3-4.

Galeotti, Mark, "Special and Intervention Forces of the Former Soviet Union". *Jane's Intelligence Review*, vol 4, no 10, October 1992, pp. 438-440.

Gareev, M.A., "On Military Doctrine and Military Reform in Russia". *The Journal of Soviet Military Studies*, vol 5, no 4, December 1992, pp. 539-551.

Georgoyev, Vladimir, "Reservists Will Not Be Sent To Chechnya". *Nezavisimaya Gazeta*, 8 February 2000, p. 2.

Golts, Alexander, "Army Poised To Strike In Russia's Elections". *The Russia Journal*, 15-21 November 1999.

Golts, Alexander, "Putin's Military Vision". *The Russia Journal*, 21-28 February 2000.

- Grau, Lester W. and Timothy L. Thomas, "A Russian View of Future War: Theory and Direction". *The Journal of Slavic Military Studies*, vol 9, no 3, September 1996, pp. 501-518.
- Gross, Natalie, "Reflections on Russia's New Military Doctrine". *Jane's Intelligence Review*, vol 4, no 8, August 1992, pp. 339-341.
- Gross, Natalie, "Russia's Strategy – East or West?". *Jane's Intelligence Review*, vol 4, no 6, June 1992, pp. 256-258.
- Gross-Hassman, Natalie, "A Military Coup in Russia?". *Jane's Intelligence Review*, vol 7 no 11, November 1995, pp. 493-494.
- Gureev, Oleg Colonel, "Russia Needs A Strong Army". *Krasnaya Zvezda*, 16 February 2000, pp 1-2.
- Hall, Robert, "Russia's Mobile Forces – Rationale and Structure", *Jane's Intelligence Review*, vol 5 no 4, April 1993, pp. 154-155.
- Holcomb, James, "Russian Military Doctrine – Structuring for the Worst Case", *Jane's Intelligence Review*, vol 4, no 12, December 1992, pp. 531-534.
- Isby, David C., "The Hungry Army". *Jane's Intelligence Review*, vol 5, no 2, February 1993, p 51.
- Isby, David C., "Losing the 'Battle of the Harvest'". *Jane's Intelligence Review*, vol 5, no 1, January 1993, pp. 3-5.
- Isby, David C., "Russia Looks To New Breed Of Blue Berets". *Jane's Intelligence Review*, vol 10 no 5, May 1998, pp. 5-8.
- Isby, David C., "Russia's Once-Revered Spetsnaz Look To Rally after Chechnia". *Jane's Intelligence Review*, vol 9 no 12, December 1997, pp. 534-537.
- Jane's Sentinel Security Assessment – RUSSIA AND THE CIS – UPDATE 7*, 7 February 2000.
- Jane's World Armies 06, Russian Federation*, 10 January 2000.
- Jordan, John, "The Russian Navy in Transition". *Jane's Intelligence Review*, vol 6, no 4, April 1994, pp. 154-159.
- Kaufman, Stuart, "Lessons From the 1991 Gulf War and Russian Military Doctrine". *The Journal of Slavic Military Studies*, vol 6, no 3, September 1993, pp. 375-396.
- Kazachkin, Boris, Lieutenant General, "To Correct The Style Of Work". *Na boevom postu* (Moscow military district of air and anti-aircraft defense forces), 17 February 2000, p.3.
- Kedrov, Ilya, "The Main Thing is to Preserve Lives". *Nezaisimoe Voennoe Obozrenie*, No. 3, 28 January 2000, p. 1.

- Kipp, Jacob W., "Soviet Military Doctrine in the Post-Cold War Era". *Military Review*, December 1990, pp. 3-15.
- Kipp, Jacob W., "Where Then is the Threat: Soviet Military Doctrine in the Post Cold-War Era". *Military Review*, vol 70, December 90,
- Kramer, Mark. "What is Driving Russia's New Strategic Concept?". *CDI Russia Weekly #85*, 20 January 2000.
- Lambeth, Benjamin S., "Russia's Wounded Military". *Foreign Affairs*, vol 74 no 2, March/April 1995, pp. 86-98.
- Marshall-Hasdell, Dennis J., "The Russian Air Force – Prospects for the Future". *Jane's Intelligence Review*, vol 5, no 12, pp. 531-533.
- The Military Balance 1992/1993*, The International Institute for Strategic Studies, Brassey's, 1992.
- The Military Balance 1993/1994*, The International Institute for Strategic Studies, Brassey's, 1993.
- The Military Balance 1998/1999*, The International Institute for Strategic Studies, Oxford Press, 1998.
- "Moscow's Political Elite Hail Putin Victory". *Radio Free Europe/Radio Liberty Newsline*, vol 4, no. 62, Part 1, 28 March 2000. 30 March 2000
- "New Military Doctrine Allows Nuclear Arms Use In Critical Situations". *Interfax*, 7 October 1999.
- "New Military Doctrine Still Includes Nuclear First Strike". *The Russia Journal*, 17-23 May 1999.
- Odnokolenko, Oleg, "Putin's Appeal". *Segodnya*, 2 February 2000, p. 1.
- "On Crimes Committed By Officers", translated by A. Ignatkin. *Rossiia*, No. 4, February 2000, p. 2.
- Orr, Michael, "Peacekeeping – A New Task for Russian Military Doctrine". *Jane's Intelligence Review*, vol 6, no 7, pp. 307-309.
- Orr, Michael, "Peacekeeping and Overstretch in the Russian Army". *Jane's Intelligence Review*, vol 6, no 8, pp 363-365.
- Perera, Judith, "Russian Forces Edge Closer To Financial Ruin". *Jane's Intelligence Review*, vol 9 no 2, February 1997, pp. 69-70.
- Raevsky, Andrei, "Development of the Russian National Security Policies: Military Reform". *The Journal of Slavic Military Studies*, vol 6, no 4, December 1993, pp. 529-561.

- Rarchomenko, Walter, "The State of Russia's Armed Forces and Military Reform", *Parameters*, vol 29 no 4, Winter 1999/2000.
- "Rising Drug Use In The Russian Armed Forces". *Jamestown Foundation Monitor*, 20 July 1999..
- Romanov, Vitaly, "Fight At Military Base Leads To Tragic Death". *Segodnya*, 16 February 2000, p. 7.
- Rumer, Eugene B., *The Building Blocks of Russia's Future Military Doctrine*, Rand Corporation, 1994
- "Russian Army's Suicide Toll 22.7% of All Casualties". *Itar-Tass*, 20 April 2000.
- "Russian Defense Minister To Keep His Post". *Jamestown Foundation Monitor*, vol VI, No. 63, 29 March 2000
- Scott, Harriet Fast and William F. Scott, editors, *The Soviet Art of War: Doctrine, Strategy, and Tactics*. Westview Press, Boulder, Colorado, 1982.
- Shaburkin, Alexander, "A New Draft Military Doctrine Stipulates A Wider Use Of Nuclear Weaponry". *Nezavisimaya Gazeta*, 5 February 2000, p. 1. On-line. Available from <http://news.eastview.com/>
- Solovyev, Vadim, "Number of Non-Combat Casualties Equals That Of Combat Losses". *Nezavisimoe Voennoe Obozreniye*, No 4, 2-10 February 2000, p. 1. On-line. Available from <http://news.eastview.com/>
- Starr, Richard F., *The New Military in Russia: Ten Myths That Shape the Image*, Annapolis, Maryland: Naval Institute Press, 1996.
- Tanner, Adam, "Nearly 100,000 Russian Officers Without Apartments". *Reuters*, 29 July 1999.
- Thomas, Timothy L., "The Russian Military and the 1995 Duma Elections: Dissatisfaction Continues to Grow in the Armed Forces". *The Journal of Slavic Military Studies*, vol 9, no 3, September 1996, pp. 519-547.
- Waters, Trevor, Dr., "The New Russian Army One Year On -Hopes and Fears". *Jane's Intelligence Review*, vol 5, no 7, July 1993, pp. 305-306.
- Woff, Richard, "A Russian Army", *Jane's Intelligence Review*, Vol 4, no 5, May 1992. pp.198-200.
- Woff, Richard, "Russian Mobile Forces 1993-95". *Jane's Intelligence Review*, vol 5 no 3, March 1993, pp. 118-119.
- Woff, Richard, "What Future for Russia's AirDefence". *Jane's Intelligence Review*, vol 8 no 12, December 1996, p. 537.

Ya Kirshin, Yu., "The Army in a Democratic Society and Democracy in the Army". *The Journal of Slavic Military Studies*, vol 6, no 1, March 1993, pp. 3-20.

Yermolin, Vladimir, "Defeat of the General Staff". *Izvestia*, 5 February 2000, p. 3. On-line.

Yermolin, Vladimir, "There is a Vocation – Sweeping One's Motherland". *Izvestia*, 8 February 2000, p. 3.

Yermolin, Vladimir, "Sent by the Motherland: A Conscript Cannot Refuse Being Sent To War". *Izvestia*, 30 October 1999, p. 1.

Zapodinskaya, Yekaterina, "Murder Suspected In Elite Commando Unit". *Kommersant-daily*, 16 February 2000, pp. 1,3.

¹ For the purposes of this research paper, the use of the term "army" is not restricted to ground forces but includes all conventional military services – ground, air and naval forces -- unless specifically stated.

² Charles J. Dick, "The Russian Army – Present Plight and Future Prospects," *Jane's Intelligence Review Yearbook 1994/1995*, 40.

³ Stephen J. Blank, "Crisis in the Russian Military Economy", *Jane's Intelligence Review Yearbook 1994/1995*, 36.

⁴ Andrei Raevsky, "Development of the Russian national Security Policies: Military Reform", *The Journal of Slavic Military Studies*, December 1993, 529.

⁵ Yu. Ya Kirshin, "The Army in a Democratic Society and Democracy in the Army", *The Journal of Slavic Military Studies*, March 1993, 3.

⁶ C.J. Dick, "The Crisis in the Soviet Military", *Jane's Intelligence Review*, February 1992, 72.

⁷ C.J. Dick, "The Crisis in the Soviet Military", *Jane's Intelligence Review*, February 1992, 72.

⁸ C.J. Dick, "The Crisis in the Soviet Military", *Jane's Intelligence Review*, February 1992, 73.

⁹ C.J. Dick, "The Crisis in the Soviet Military", *Jane's Intelligence Review*, February 1992, 73.

¹⁰ C.J. Dick, "The Crisis in the Soviet Military", *Jane's Intelligence Review*, February 1992, 73.

¹¹ C.J. Dick, "The Crisis in the Soviet Union", *Jane's Intelligence Review*, February 1992, 73.

¹² Robert W. Duggleby, "The Disintegration of the Russian Armed Forces", *The Journal of Slavic Military Studies*, June 1998, 1.

¹³ Robert W. Duggleby, "The Disintegration of the Russian Armed Forces", *The Journal of Slavic Military Studies*, June 1998, 6.

¹⁴ C.J. Dick, "The Crisis in the Soviet Union", *Jane's Intelligence Review*, February 1992, 74.

¹⁵ C.J. Dick, "The Crisis in the Soviet Union", *Jane's Intelligence Review*, February 1992, 74.

¹⁶ Andrei Raevsky, "Development of the Russian National Security Policies: Military Reform", *The Journal of Slavic Military Studies*, December 1993, 533.

¹⁷ Richard F. Starr, *The New Military in Russia: Ten Myths That Shape the Image* (Annapolis: Naval Institute Press), 1996, #

¹⁸ Andrei Raevsky, "Development of the Russian National Security Policies: Military Reform", *The Journal of Slavic Military Studies*, December 1993, 534.

¹⁹ Definition of near abroad

- ²⁰ John Jordan, "The Russian Navy in Transition", *Jane's Intelligence Review*, April 1994, 158.
- ²¹ Data compiled from series of yearly publications, *The Military Balance*, International Institute For Strategic Studies, London:Brassey's.
- ²² John Jordan, "The Russian Navy in Transition", *Jane's Intelligence Review*, April 1994, 154.
- ²³ John Jordan, "The Russian Navy in Transition", *Jane's Intelligence Review*, April 1994, 157.
- ²⁴ Data compiled from series of yearly publications, *The Military Balance*, International Institute For Strategic Studies, London:Brassey's.
- ²⁵ Dennis J. Marshall-Hasdell, "The Russian Air Force – Prospects for the Future", *Jane's Intelligence Review*, December 1993, 533.
- ²⁶ Piotr Butowski, "Russia's New Air Force Enters a Tight Manoeuvre", *Jane's Intelligence Review*, May 1, 1999, 1.
- ²⁷ Lester W. Grau and Timothy L. Thomas, "A Russian View of Future War: Theory and Direction", *The Journal of Slavic Military Studies*, September 1996, 505.
- ²⁸ Pavel K. Baev, "Russian Military Thinking and the 'Near Abroad'", *Jane's Intelligence Review*, December 1994, 533.
- ²⁹ Andrei Raevsky, "Development of the Russian National Security Policies: Military Reform", *The Journal of Slavic Military Studies*, December 1993, 545.
- ³⁰ Lester W. Grau and Timothy L. Thomas, "A Russian View of Future War: Theory and Direction", *The Journal of Slavic Military Studies*, September 1996, ##
- ³¹ Data compiled from series of yearly publications, *The Military Balance*, International Institute For Strategic Studies, London:Brassey's.
- ³² Lester W. Grau and timothy L. Thomas, "A Russian View of Future War: Theory and Direction", *The Journal of Slavic Military Studies*, September 1996, 505.
- ³³ Lester W. Grau and Timothy L. Thomas, "A Russian View of Future War: Theory and Direction", *The Journal of Slavic Military Studies*, September 1996, 505.
- ³⁴ Russia actually drafted an initial military doctrine in 1992. However, this doctrine ultimately failed to meet the political and military expectations, and as a result was never ratified.
- ³⁵ Spencer D. Bakich, "The Military Doctrine of the Russian Federation: Working Document or Anachronism?", *Conflict Studies* #301, Research Institute for the Study of Conflict and Terrorism, July/August 1997, 2.
- ³⁶ Stephan D. Bakich, "The Military Doctrine of the Russian Federation: Working Document or Anachronism?", *Conflict Studies* #301, Research Institute for the Study of Conflict and Terrorism, July/August 1997,

³⁷ Charles J. Dick, "Counter-Blows in Russian Military Thinking", *The Journal of Slavic Military Studies*, September 1993, 397.

³⁸ Lester W. Grau and Timothy L. Thomas, "A Russian View of the Future War: Theory and Direction", *The Journal of Slavic Military Studies*, September 1996, 504.

³⁹ Spencer D. Bakich, "The Military Doctrine of the Russian Federation: Working Document or Anachronism?", *Conflict Studies #301*, Research Institute for the Study of Conflict and Terrorism, July/August 1997, 4.

⁴⁰ Pavel K. Baev, "Russian Military Thinking and the 'Near Abroad'", *Jane's Intelligence Review*, December 1994, 533.

⁴¹ Alexander Shaburkin, "The New Draft Military Doctrine Is Better Than the Old Military Doctrine", *Nezavisimaya Gazeta*, 5 February 2000

⁴² "Russia's Military Doctrine In the Wrong Direction", *Reuters News Service*, 3 April 2000

⁴³ Stephan D. Bakich, "The Military Doctrine of the Russian Federation: Working Document or Anachronism?", *Conflict Studies #301*, Research Institute for the Study of Conflict and Terrorism, July/August 1997, 25.

⁴⁴ *The Military Balance 1998/99*, The International Institute for Strategic Studies, London:Oxford University Press, 105.

⁴⁵ *The Military Balance 1998/99*, The International Institute for Strategic Studies, London:Oxford University Press, 104.

⁴⁶ Stephen Blank, "Crisis in the Russian Military Economy", *Jane's Intelligence Yearbook 1994/95*, 36.

⁴⁷ Charles J. Dick, "Past Cruelties Hinder The Taming Of The Bear", *Jane's Intelligence Review*, December 1998, 6.

⁴⁸ Stephan D. Bakich, "The Military Doctrine of the Russian Federation: Working Document or Anachronism?", *Conflict Studies #301*, Research Institute for the Study of Conflict and Terrorism, July/August 1997, 12.

⁴⁹ Mark Galeotti, "Decline and Fall – The Russian Defense Budget", *Jane's Intelligence Review*, Spetember 1994, 386.

⁵⁰ John Jordan, "The Russian Nay in Transition", *Jane's Intelligence Review*, April 1994, 155.

⁵¹ Charles Dick, "The Russian Army – Present Plight and Future Prospects", *Jane's Intelligence Yearbook 1994/95*, 42.

⁵² Stephen Blank, "Crisis in the Russian Military Economy", *Jane's Intelligence Yearbook 1994/95*, 36.

⁵³ Michael Orr, "Peacekeeping and Overstretch in the Russian Army", *Jane's Intelligence Review*, August 1994, 364.

⁵⁴ Data compiled from series of yearly publications, *The Military Balance*, International Institute For Strategic Studies, London:Brassey's.

⁵⁵ Robert W. Duggleby, "The Disintegration of the Russian Armed Forces", *The Journal of Slavic Military Studies*, June 1998, 15.

⁵⁶ Charles J. Dick, "Past Cruelties Hinder the Taming of the Bear", *Jane's Intelligence Review*, December 1998, 5.

⁵⁷ Charles Dick, "The Russian Army – Present Plight and Future Prospects", *Jane's Intelligence Review Yearbook 1994/95*, 41.

⁵⁸ Mark Galeotti, "Crisis Continues for Russia's Army", *Jane's Intelligence Review*, June 1998, 4.

⁵⁹ Robert W. Duggleby, "The Disintegration of the Russian Armed Forces", *The Journal of Slavic Military Studies*, June 1998, 16.

⁶⁰ Spencer D. Bakich, "The Military Doctrine of the Russian Federation: Working Document or Anachronism?", *Conflict Studies #301*, Research Institute for the Study of Conflict and Terrorism, July/August 1997, 11.

⁶¹ Robert W. Duggleby, "The Disintegration of the Russian Armed Forces", *The Journal of Slavic Military Studies*, June 1998, 16.

⁶² Lester W. Grau and Timothy L. Thomas, "A Russian View of Future War: Theory and Direction", *The Journal of Slavic Military Studies*, September 1996, 514.

⁶³ Charles Dick, "The Russian Army – Present Plight and Future Prospects", *Jane's Intelligence Review Yearbook 1994/95*. 43.

⁶⁴ Robert W. Duggleby, "The Disintegration of the Russian Armed Forces", *The Journal of Slavic Military Studies*, June 1998

⁶⁵ Robert W. Duggleby, "The Disintegration of the Russian Armed Forces", *The Journal of Slavic Military Studies*, June 1998, 2.

⁶⁶ Benjamin S. Lambeth, "Russia's Wounded Military", *Foreign Affairs*, March/April 1995, 91.

⁶⁷ David C. Isby, "The Hungry Army", *Jane's Intelligence Review*, February 1993, 51.

⁶⁸ David C. Isby, "The Hungry Army", *Jane's Intelligence Review*, February 1993, 51.

⁶⁹ Lester W. Grau and Timothy L. Thomas, "A Russian View of Future War: Theory and Direction", *The Journal of Slavic Military Studies*, September 1996, 514.

⁷⁰ Stephan D. Bakich, "The Military Doctrine of the Russian Federation: Working Document or Anachronism?", *Conflict Studies #301*, Research Institute for the Study of Conflict and Terrorism, July/August 1997, 14.

⁷¹ John Jordan, "The Russian Navy in Transition", *Jane's Intelligence Review*, April 1994, 155.

⁷² John Jordan, "The Russian Navy in Transition", *Jane's Intelligence Review*, April 1994, 156.

⁷³ Mark Galeotti, "How Long is Russia's Arm?", *Jane's Intelligence Review*, August 1999, 9.

⁷⁴ Dennis J. Marshall-Hasdell, "The Russian Air Force – Prospects for the Future", *Jane's Intelligence Review*, December 1993, 532.

⁷⁵ Robert W. Duggleby, "The Disintegration of the Russian Armed Forces", *The Journal of Slavic Military Studies*, June 1998, 15.

⁷⁶ Charles Dick, "The Russian Army – Present Plight and Future Prospects", *Jane's Intelligence Review Yearbook 1994/1995*, 44.

⁷⁷ Lester W. Grau and Timothy L. Thomas, "A Russian View of Future War" Theory and Direction", *The Journal of Slavic Military Studies*, September 1996, 504.

⁷⁸ Robert W. Duggleby, "The Disintegration of the Russian Armed Forces", *The Journal of Slavic Military Studies*, June 1998,